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STUDY OF ACHIEVEMENT--JUNIOR KINDERGARTEN, WHO IS SERVED AND WHO GOES.

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IN THE TORONTO SCHOOL SYSTEM IN 1961-1962 THERE WERE 8,684 CHILDREN IN SENIOR KINDERGARTEN. NINETY-EIGHT OF THE STUDENTS WERE NOT TORONTO RESIDENTS AND SO WERE NOT INCLUDED IN THE ANALYSIS. THERE WERE 3,839 OF THESE CHILDREN ATTENDING SCHOOLS WHICH PROVIDED JUNIOR KINDERGARTENS, BUT OF THIS NUMBER ONLY SLIGHTLY OVER 1/3 ACTUALLY ATTENDED JUNIOR KINDERGARTEN. TWO QUESTIONS POSED WERE, (1) WHAT SORT OF PARENTS (BY POPULATION CHARACTERISTICS) HAD JUNIOR KINDERGARTEN AVAILABLE FOR THEIR CHILDREN, AND (2) WHAT WERE THE CHARACTERISTICS OF THE PARENTS WHO WERE ACTUALLY SENDING THEIR CHILDREN TO JUNIOR KINDERGARTEN THE 3 TYPES OF POPULATION CHARACTERISTICS STUDIED WERE CULTURAL, SOCIO-ECONOMIC AND FAMILIAL. IT WAS FOUND THAT MORE JUNIOR KINDERGARTENS WERE AVAILABLE IN AREAS WHERE THE CHILD SPOKE A FOREIGN LANGUAGE EITHER WITH OR WITHOUT ENGLISH. HOWEVER, IN COMPARING WHO ENROLLED AND WHO DID NOT, A CHILD FROM AN ENGLISH SPEAKING HOME WAS TWICE AS LIKELY TO BE ENROLLED. IT WAS FOUND THAT THE CHARACTERISTICS OF THE CHILDREN ACTUALLY ENROLLED IN JUNIOR KINDERGARTEN CLOSELY PARALLELED THOSE TO WHOM IT WAS NOT AVAILABLE. THE AUTHOR CONCLUDED THAT IN SPITE OF THE FACT THAT JUNIOR KINDERGARTENS WERE LOCATED WHERE THEY WERE MOST NEEDED, THE STUDENTS WHO WOULD BENEFIT MOST FROM THE EXPERIENCE WERE NOT BEING SENT. (CO)

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STUDY OF ACHIEVEMENT:

JUNIOR KINDERGARTEN

WHO IS SERVED AND WHO GOES

PS 000355

April, 1965

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STUDY OF ACHIEVEMENT: JUNIOR KINDERGARTEN
WHO IS SERVED AND WHO GOES

INTRODUCTION

In the Toronto school system in 1960-1961 there were thirty-six schools (approximately forty per cent) where junior kindergarten classes were available. Two questions seemed pertinent.

1. What sort of parents (by population characteristics) had this facility available for their children?
2. What were the characteristics of the parents who were actually sending their children to junior kindergarten?

This report is part of the Longitudinal Study of Achievement now in progress[1], and is intended to complement the extensive analysis of the senior kindergarten population of 1961-1962[2].

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1. Study of achievement: an outline of a longitudinal study from junior kindergarten through the elementary grades, Research Department, 1964.

2. Study of achievement: report on population study of junior and senior kindergarten pupils, 1960-1961 and 1961-1962, Research Department, 1965. PS 000 354

PURPOSE

The purpose of this portion of the study was two-fold. First the "location" of the junior kindergartens had to be determined; i.e., what were the characteristics of the population of parents who could have sent their children to junior kindergarten? Did these parents differ, on the characteristics studied, from the parents comprising the population who did not have junior kindergarten available?

After discovering to whom junior kindergarten was available the data were reviewed in order to discover the characteristics of the parents who actually sent their children to junior kindergarten.

Currently there is great concern on this continent for the "culturally disadvantaged." Lack of books in the home, apathetic attitudes toward school, and crowded living conditions are all pointed to as factors that handicap a child who enters a school system that places a premium on reading, education and similar goals. It is then suggested that a child's school achievement is affected by his home life and parents. Not just day to day home life, but the kind of home, its size and type, the language spoken there, the educational and socio-economic level of the parents could all be pertinent factors in determining how well a child does in our schools.

It seems possible that the children who come from homes with the above "disadvantages" would be those who would benefit most greatly from junior kindergarten experience. For instance, the children born in non-English speaking countries, or whose home language is not English would have an extra year for acculturation and daily exposure to English. It

may be that the lower the educational level of their parents, the more benefit may be derived by children from attendance at junior kindergarten. Occupation of parents is closely related to the economic level of the family. Davis[1] implies that those students from lower income groups might benefit more (in terms of school achievement) from an early exposure to school values than students from middle income groups. The above characteristics and several additional ones are dealt with in the present report.

If we accept the premise that certain children stand more in need of junior kindergarten than others, then two questions arise. Are these children served by junior kindergarten, and if they are so served, do their parents enroll them?

These questions have pertinence not only in terms of the Study of Achievement, but also in relation to the proposed extension of junior kindergartens.

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1. Davis, Allison. Social-class influences upon learning. Harvard University Press, 1962.

METHOD

The entire population consisted of the 8,684 children in senior kindergarten in the Toronto school system in 1961-62. Ninety of these children could not be included in this analysis (see the Population Study mentioned below). Of the remaining 8,594 children in senior kindergarten in 1961-62, 4,755 children attended schools with no junior kindergarten facilities, and 3,839 children attended schools which provided junior kindergartens[1]. Of these 3,839 children, 1,398 of them, slightly over one-third, actually did go to junior kindergarten. (In most schools there was not space for all applicants.) Thus the population was divided into two parts--between those who did not have an opportunity to go to junior kindergarten and those who did--and the second of these parts was further divided into who actually went to junior kindergarten and who did not.

The data were collected by kindergarten teachers between the years of 1960 and 1962[2]. These data are reported in detail (see Appendix) by pupil percentages for each part of the population. The entire population of 8,594 children was divided into two populations on the basis of <u>type of school</u> in which they were enrolled in senior kindergarten. Type of school was defined as "with junior kindergarten" and "no junior kindergarten available." Differences on type of school refer to

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1. Ninety-eight of these students (2.6%) are not Toronto residents. For further discussion see Appendix B.

2. For a precise explanation of the methods of data collection, see Study of achievement: report on population study of junior and senior kindergarten pupils, 1960-61 and 1961-62, Research Department, 1965.

difference in the distribution of the population characteristics on the basis of (theoretical) availability of junior kindergarten[1].

The population which had junior kindergarten available was divided into two populations on the basis of enrollment, i.e., whether or not the child was actually enrolled in junior kindergarten. Differences between these two groups (SK and JK) and SK only refer to differences in the distribution of population characteristics on the basis of actual enrollment in junior kindergarten.

The three types of population characteristics studied were cultural, socio-economic and familial. Cultural characteristics selected were: race of parents, country of birth of pupils and parents, language(s) of pupils and of the home, and religion of parents; socio-economic characteristics used were: occupations of parents, formal education of parents, and type and size of pupil residences. The only familial factor used was size of family. There were two reasons for choosing these particular population characteristics for study. It was hoped that the examination of how these characteristics were distributed in the populations to whom junior kindergarten was, and was not, available would permit a determination of whether children who have been described as in need of junior kindergarten would have access to it. Secondly, the study of the distribution of population characteristics in the two groups to whom junior kindergarten was available (two groups differentiated as to whether or not the child was <u>enrolled</u> in junior kindergarten) would show if the children who "needed" junior kindergarten most were actually being enrolled.

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1. <u>Note</u>: In the tables under the heading "Kindergarten Enrollment" students who attended senior kindergarten only are called (SK); students who attended both junior and senior kindergarten are called (SK and JK). Thus the total population of a school where junior kindergarten was available is [SK + (SK and JK)].

OF THE SENIOR KINDERGARTEN POPULATION:

CHILDREN WHO HAVE GONE TO JUNIOR KINDERGARTEN ARE OLDER

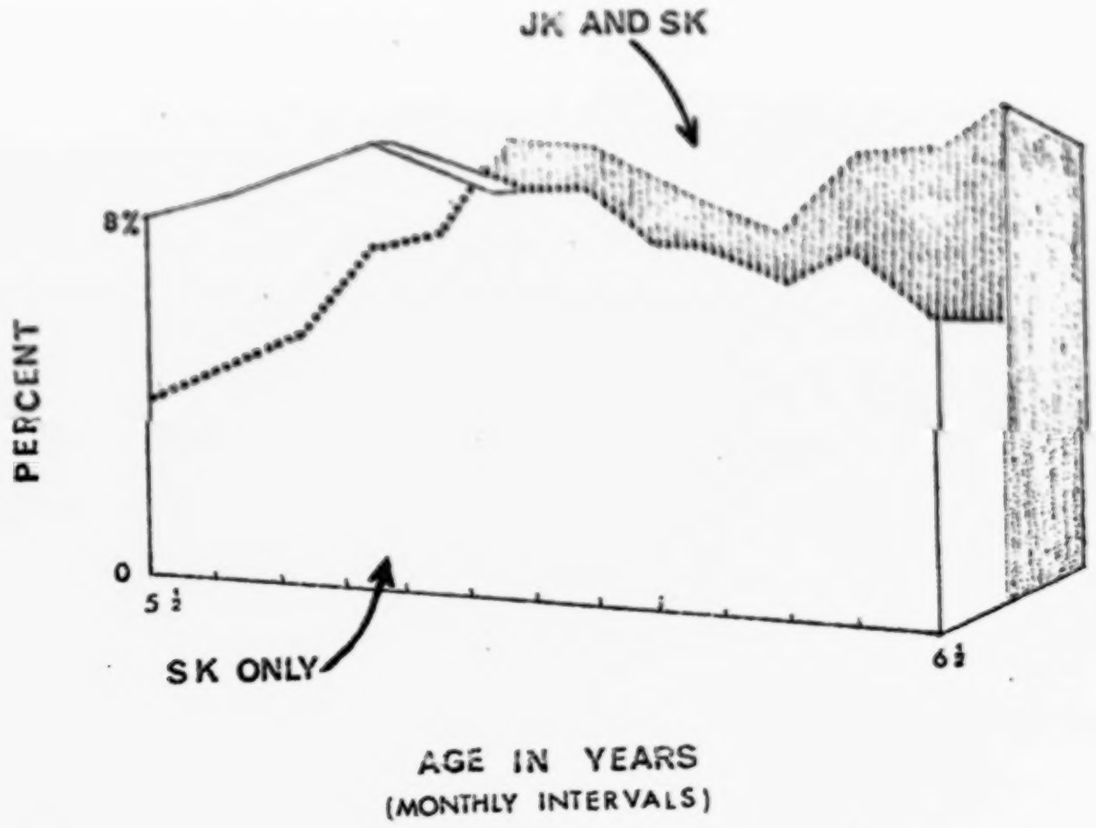

Fig. 1. Three dimensional figure of the percent of children with ▥ and without □ Junior Kindergarten experience falling at each age category.

RESULTS AND INTERPRETATION

Before discussing the tabulated data, it is pertinent to present several pieces of information which are not contained in the tables and are not mentioned elsewhere in this report. The impression given heretofore was that any parents who wished their child to go to junior kindergarten, where such facilities were available, could enroll the child. This was not true in 1960-61, nor is it true now. While thirty-six of the eighty-six schools provided a junior kindergarten, only about thirty-seven per cent of the children served by those schools could be accommodated in junior kindergarten. The demand for enrollment in junior kindergarten varied from school to school, and from district to district, but the demand usually exceeded the number of seats available. As there were more applicants for junior kindergarten than there was space to accommodate them, the students who were accepted represent a selected group--one that was biased and not representative of the later senior kindergarten population. The most frequently used criterion for accepting the child as a junior kindergarten student was age. The older the applicant, the better were his chances to be accepted. For this reason the senior kindergarten students who had attended junior kindergarten are older than those who did not attend junior kindergarten as is illustrated in Figure 1.

Because they are older, it can be argued that the senior kindergarten students with junior kindergarten experience should not be compared with those who lack such experience. This will require special matching procedures when studying effects of junior kindergarten on

achievement[1]. However, since most of the following comparisons are made between the parents of the two groups and the only comparisons made between pupils per se are on factors unconnected with age, this argument is not pertinent here.

The data will be discussed only in terms of the differences between our two divisions of populations on several different characteristics. Any questions concerning the distribution of such characteristics in the populations discussed may be satisfied by looking at Tables 1 - 11, (see Appendix) or for a more exhaustive analysis including many more population characteristics, by perusing the previously mentioned Population Study. Here we are concerned only with comparing two pairs of groups, and are reporting only those characteristics which do show differences between them. The only differences mentioned will be those which were statistically significant. By statistically significant, it is meant those differences so large that could have occurred by chance less than once in one hundred times.

The characteristics will be discussed in the following manner. The categories of the characteristics will be explained only if this seems necessary for clarification. First the differences between populations having junior kindergarten available and those not having it available will be discussed. Next the contrast will be made between those making use of junior kindergarten and those not making use of it, when it is available. Cultural factors will be discussed first, then socio-economic factors, and lastly size of family.

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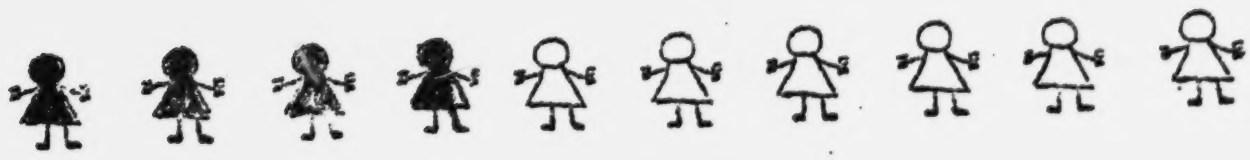
1. A study is presently underway to evaluate the possible effects of junior kindergarten on later school achievement.

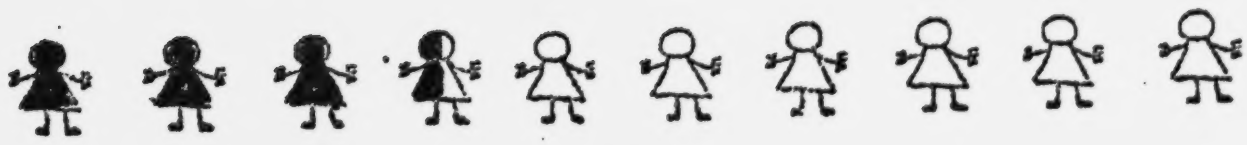
OF THOSE WHO CAN *

WHO GOES TO JUNIOR KINDERGARTEN?

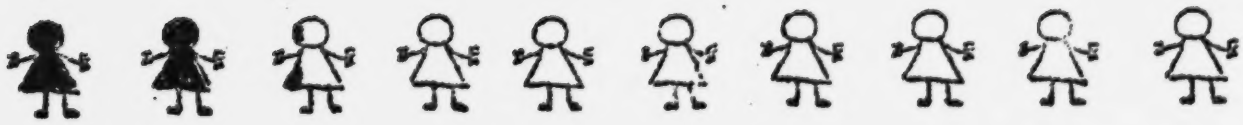
BORN IN CANADA



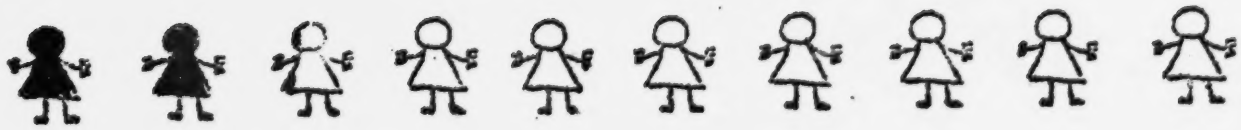
BORN IN BR. ISLES



BORN IN GERMANY



BORN IN PORTUGAL



BORN IN ITALY

= 10%

Going to Junior Kindergarten

= 10%

Going to Senior Kindergarten Only

* In terms of classroom space the expected percentage for each category is 36.7%

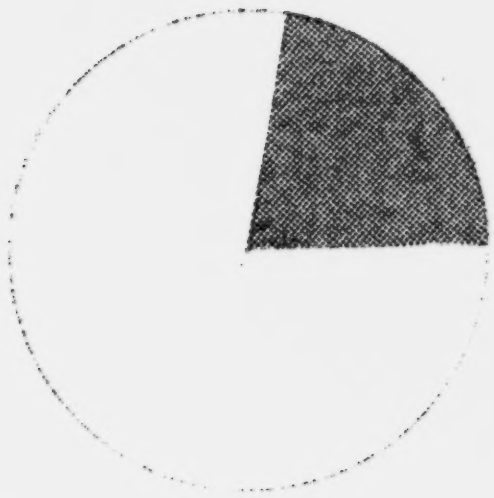
Figure 2

Cultural Factors

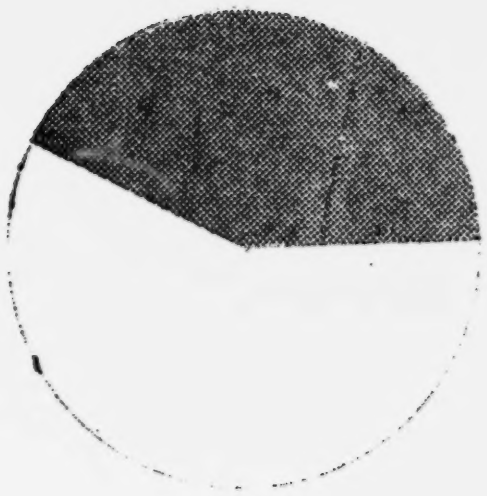
Comparisons of the distribution of the races in our population segments were categorized separately for fathers and mothers. The Negroid parents were represented equally in the areas in which junior kindergarten was and was not available. There were relatively more Caucasian fathers in the areas not served by junior kindergarten, but there were no differences in the proportions of Caucasian mothers. While there were no differences for Asiatic fathers, more Asiatic mothers fell into the group that had access to junior kindergarten. The only difference in enrollment was that Asiatic mothers were more likely to take advantage of junior kindergarten when offered.

The countries of birth of child, father and mother were categorized into Canada, British Isles, United States, Italy, Germany, Portugal and Other (Tables 2A, 2B and 2C). Canadian born children were significantly under-represented in the group for whom junior kindergarten was available, and the Italian and Portuguese children were over-represented. A reversal of this trend became obvious when it was discovered that a Canadian born child's chances of actually enrolling in junior kindergarten exceed the percentage expected in terms of availability. Conversely, the per cent of Italian and Portuguese born children attending junior kindergarten was much smaller than would be expected. Figure 2 dramatizes these differences. Similarly it was found that parents born in English speaking countries are more likely to live outside the areas served by junior kindergarten but when it is available they are more likely to send their children. The parents born in non-English speaking countries, especially Portugal and Italy, are well served by junior kindergartens, but for the most part do not send their children.

WHEN JUNIOR KINDERGARTEN IS AVAILABLE



A CHILD FROM A NON-ENGLISH SPEAKING HOME HAS TWO CHANCES IN TEN OF GOING TO JUNIOR KINDERGARTEN



A CHILD FROM AN ENGLISH-SPEAKING HOME HAS FOUR CHANCES IN TEN OF GOING TO JUNIOR KINDERGARTEN

Figure 3

The language(s) spoken by the pupil and in the home were categorized separately (Table 3). In the areas served by junior kindergartens it was found that the differences were in favour of the child speaking a foreign language either with or without English. However, when comparing who enrolled and who did not, the differences were greatly in favour of the English speaking child being enrolled in junior kindergarten. Concerning language spoken in the home the differences favoured non-English homes in the areas served by junior kindergartens. The trend was reversed concerning who was enrolled in junior kindergarten. As shown in Figure 3, a child from an English speaking home was twice as likely to be enrolled in junior kindergarten as one from a non-English speaking home.

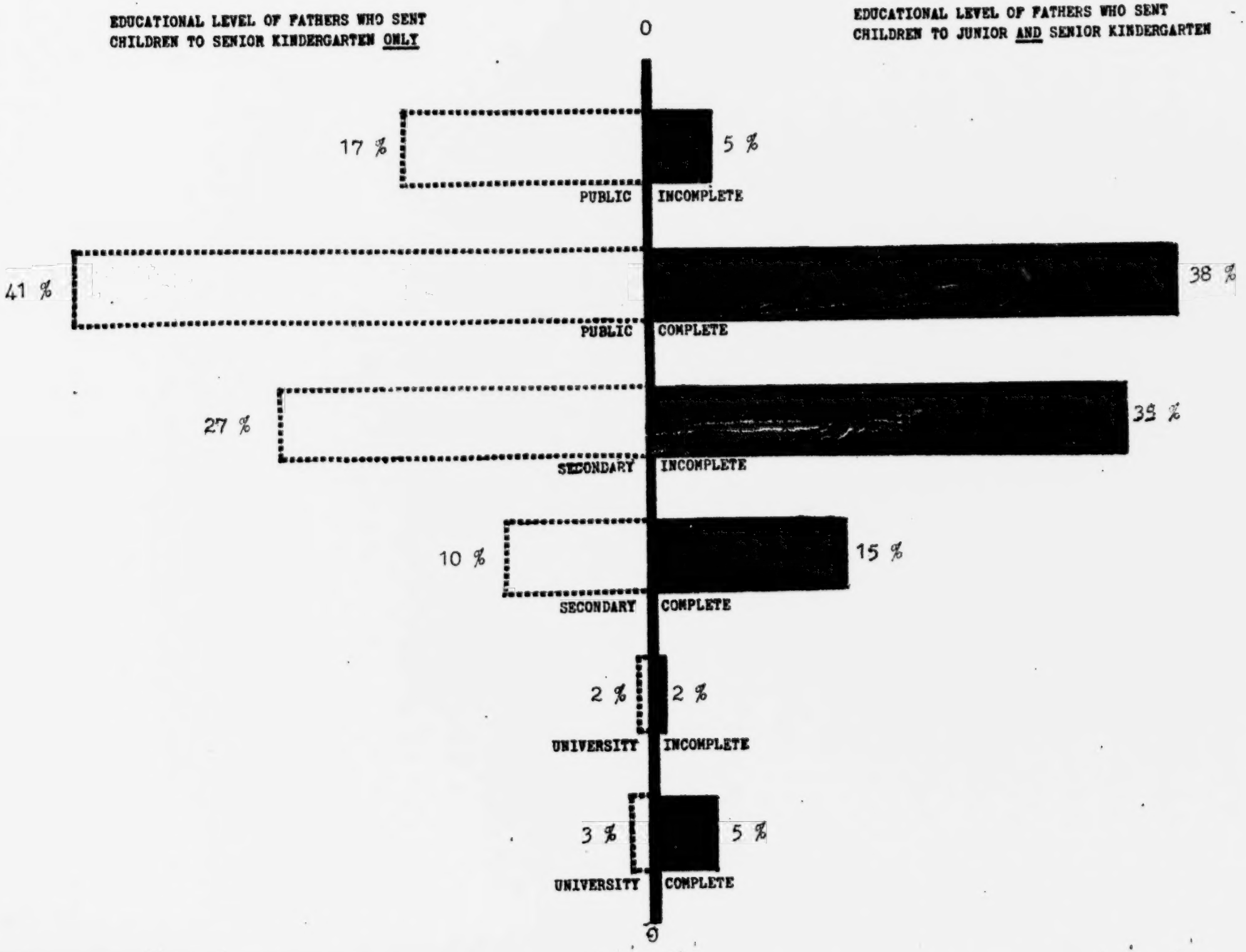
Religion of the parents was categorized according to Protestant, Roman Catholic, Jewish, Buddhist and Other. Despite the over-representation of Roman Catholic parents in the areas containing junior kindergarten, the Protestant and Jewish parents were much more likely to enroll their children when it was available. This phenomenon is not a function of Catholic parents sending their children to separate schools, as nearly thirty-nine per cent of the parents enrolling their children in senior kindergarten, where junior kindergarten was available, were Catholic (see Table 4). Thus the Catholic parents who eventually sent their children to senior kindergarten showed a marked reluctance to enroll their children in junior kindergarten. It is likely that this is not a reflection of religious attitude, but rather is dependent on the religious affiliation of the non-English speaking parents referred to above.

Socio-Economic Factors

There are seven occupational categories of the parents. Categories one through three are the manual occupations: one referring to unskilled and/or unemployed; two, semi-skilled; and three, skilled. Categories four to seven are the primarily non-manual occupations ranging from four which is the category for sales or clerical work up to seven which is the category for owners of large business and major professionals. These occupational categories are listed for both fathers and mothers (see Table 5), but since less than twenty-five per cent of the mothers reported on this question (as opposed to nearly ninety-four per cent of the fathers) the discussion is limited to fathers' occupations. In the areas where junior kindergarten was not available there was a significantly larger proportion of fathers in the top four categories (four through seven). The larger proportion of fathers in the areas served by junior kindergarten fell into categories one and two. The differences by enrollment in junior kindergarten were less striking and the pattern of enrollment is the reverse of the pattern of availability. The children whose fathers were in category one were less likely to be sent to junior kindergarten, and the children whose fathers were in category four were more likely to be sent to junior kindergarten than would be expected, based on the numbers in these categories.

Education of the parents was categorized into elementary and secondary school and university. Each of these categories is divided into incomplete and complete (see Table 6). Concerning the areas in which junior kindergarten is located the pattern is the same for fathers and mothers. In the areas served by junior kindergarten there are more parents who have attended elementary school (with more parents completing

DOES FATHER'S EDUCATION DETERMINE WHO TAKES ADVANTAGE OF JUNIOR KINDERGARTEN?



it than not). There are less parents who have completed secondary school or university in these areas. Thus a larger proportion of parents with some secondary education or better seem to live outside the areas served by junior kindergarten. When enrollment is scrutinized, it is found that the more education the parents have the more likely they are to send their children to junior kindergarten when it is available. Figure 4 presents the pattern for fathers which is similar to the one for mothers.

Type of residence (Table 7) is another point of differentiation for the areas which are served and not served by junior kindergarten. Children living in flats and rooms were more likely to be living in an area with junior kindergarten available. Where it was not available, children were more likely to live in houses and apartments. An investigation of who actually enrolled in junior kindergarten showed that children from houses were much more likely to be enrolled than those from flats or rooms which agrees with the data on parents' occupation.

The size of pupil's residence was measured by the number of rooms (Table 8). Children from homes of five to eight rooms were more likely to live in areas <u>not</u> served by junior kindergarten. Children from homes of one to four rooms were more likely to live in areas with junior kindergarten available. However, a child actually <u>enrolled</u> in junior kindergarten was nearly twice as likely to come from a residence of five to eight rooms than from one of one to four rooms.

Familial Factor

The size of the family was measured by the number of all people living in the home, which included the immediate family and may have included relatives and servants as well. Proportionately more students from families of two to four lived in areas not served by junior kindergarten, whereas there are proportionately more families of eight or more in areas which are served. Children from familiess of two to four are proportionately more likely to be enrolled in junior kindergarten than from families of five to seven--again a reversal of the pattern of availability.

CONCLUSIONS

This report was begun in an effort to discover the population characteristics in the areas served and not served by junior kindergarten, and to discover who took advantage of this facility when it was offered. It is clear by now that junior kindergarten is most available in areas characterized by low socio-economic and educational levels of the parents. However, on each of these characteristics except one (race) it was found that in general the characteristics of the population actually enrolling their children in junior kindergarten closely paralleled the populations to whom junior kindergarten was not available, rather than the populations to whom it was available. Although this report was not organized by districts, it seems safe to conclude that any new junior kindergartens provided by the Board of Education will be fully used. The districts are heterogeneous, none of them being populated entirely by low rent, or high rent neighbourhoods. In any given district it is safe to suppose that some children from practically every economic strata will attend the school there.

If the characteristics of the population attending junior kindergarten had been those of the population for whom it was (theoretically) intended, there would be no problem. Unfortunately such is not the case. Certainly the children from non-English homes would benefit from an extra year of English, however, these children are not enrolled in junior kindergarten to an extent even remotely approaching the availability of it to them.

Children from the lower socio-economic strata might benefit by the extra year which would help to give them a background more nearly approaching that of their "middle class" schoolmates. But these are not the children who are sent to junior kindergarten. Educational level of the parents is often closely linked to the child's achievement in school--yet what children get the benefit of the extra year? Most of the children enrolled in junior kindergarten had parents with at least some secondary schooling. The children whose parents have an elementary education or less are much less likely to be enrolled in junior kindergarten.

In conclusion, it must be said that the present junior kindergartens are located in the areas where they seem to be most needed. The students who would benefit most from junior kindergarten, however, are not being sent.

IMPLICATIONS

What directions are suggested by the conclusions above? Students who attend junior kindergarten have different backgrounds from others, in the same schools, who began in senior kindergarten. This means that comparisons of the effect of junior kindergarten either by teachers or researchers cannot be made with confidence until allowances are made for differences in age and background. More important, it appears that mere availability of junior kindergartens does not ensure that all types of families will be equally "reached." If junior kindergarten is important for students of non-English speaking or low socio-economic backgrounds, e.g., Italians and unemployed parents, special ways will have to be developed for "inviting" these parents to send their children.

APPENDIX A

Table 1: Race of the Parents*

Table 2: Countries of Birth of Pupils, Fathers and Mothers

Table 3: English and/or Foreign Languages of the Pupils and of the Homes

Table 4: Religion of the Parents

Table 5: Occupational Categories of Parents

Table 6: Formal Education Categories of Parents

Table 7: Type of Pupil Residences

Table 8: Size of Pupil Residences

Table 9: Size of the Family

* All tables are given in Pupil Percentages Showing Population Differences for Type of School and Enrollment in Junior Kindergarten.

TABLE 1

RACE OF THE PARENTS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Caucasian	Negroid	Asiatic
FATHER:					
With JK (36)	SK+ (SK and JK)	3589	95.63	1.42	2.95
No JK (50)	SK only	4367	96.93	1.03	2.04
Differences by Type of School					
	SK+ (SK and JK)>			0.39	0.91
	No JK >		1.30*		
With JK (36)	(SK and JK)	1358	94.85	1.54	3.61
With JK (36)	SK only	2231	96.10	1.34	2.56
	Differences by Enrollment				
	(SK and JK)>			0.20	1.05
	SK only >		1.25		
MOTHER:					
With JK (36)	SK+ (SK and JK)	3573	96.00	1.26	2.74
No JK (50)	SK only	4329	97.07	0.95	1.99
Differences by Type of School					
	SK+ (SK and JK)>			0.31	0.75*
	No JK >		1.07		
With JK (36)	(SK and JK)	1332	94.90	1.35	3.75
With JK (36)	SK only	2241	96.65	1.21	2.14
	Differences by Enrollment				
	(SK and JK)>			0.14	1.61*
	SK only >		1.75		

* significant at or beyond .01 level

TABLE 2A

COUNTRIES OF BIRTH OF PUPILS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Country of Birth of Child						
			Canada	Br. Isles	U.S.A.	Italy	Germany	Portugal	Other
With JK (36)	SK+ (SK and JK)	3806	82.97	2.31	0.29	6.94	1.16	1.71	4.62
No JK (50)	SK only	4719	88.24	2.24	0.42	3.03	1.74	0.47	3.86
Differences by Type of School									
	SK+ (SK and JK) > No JK >		5.27*	0.07	0.13	3.91*	0.58	1.24*	0.76
With JK (36)	(SK and JK)	1395	89.89	2.29	0.07	2.73	0.72	1.00	3.30
With JK (36)	SK only	2411	78.97	2.32	0.42	9.37	1.41	2.12	5.39
	Differences by Enrollment								
	(SK and JK) > SK only >		10.92*	0.03	0.35	6.64*	0.69	1.12*	2.09*

* significant at or beyond .01 level

TABLE 2B

COUNTRIES OF BIRTH OF FATHERS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Country of Birth of Father						
			Canada	Br. Isles	U.S.A.	Italy	Germany	Portugal	Other
With JK (36)	SK+ (SK and JK)	3749	49.35	5.57	0.75	19.34	2.59	1.97	20.43
No JK (50)	SK only	4635	56.18	7.08	1.16	10.55	3.24	0.63	21.16
Differences by Type of School									
	SK+ (SK and JK) > No JK >		6.83*	1.51*	0.41	8.79*	0.65	1.34*	0.73
With JK (36)	(SK and JK)	1385	58.12	5.92	0.79	10.47	2.17	1.16	21.37
With JK (36)	SK only	2364	44.21	5.37	0.72	24.54	2.83	2.45	19.88
	Differences by Enrollment								
	(SK and JK) > SK only >		13.91*	0.55	0.07	14.07*	0.66	1.29*	1.49

* significant at or beyond .01 level

TABLE 2C

COUNTRIES OF BIRTH OF MOTHERS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Country of Birth of Mother						
			Canada	Br. Isles	U.S.A.	Italy	Germany	Portugal	Other
With JK (36)	SK+ (SK and JK)	3741	51.14	5.75	0.94	18.98	3.48	1.90	17.83
No JK (50)	SK only	4650	59.31	6.43	1.10	10.24	4.02	0.58	18.32
Differences by Type of School									
	SK+ (SK and JK) > No JK >		8.17*	0.68	0.16	8.74*	0.54	1.32*	0.49
With JK (36)	(SK and JK)	1384	59.54	7.08	1.01	9.90	3.03	1.08	18.35
With JK (36)	SK only	2357	46.20	4.97	0.89	24.31	3.73	2.38	17.52
	Differences by Enrollment								
	(SK and JK) > SK only >		13.34*	2.11	0.12	14.41*	0.70	1.30*	0.83

* significant at or beyond .01 level

TABLE 3

ENGLISH AND/OR FOREIGN LANGUAGES OF THE PUPILS AND OF THE HOMES GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Language Spoken		
			English	Non-English	English-Bilingual
PUPILS:					
With JK (36)	SK+ (SK and JK)	3784	59.67	7.77	32.56
No JK (50)	SK only	4681	69.32	5.75	24.93
Differences by Type of School					
	SK+ (SK and JK) > No JK >		9.65*	2.02*	7.63*
With JK (36)	(SK and JK)	1391	69.09	4.03	26.88
With JK (36)	SK only	2393	54.20	9.95	35.85
	Differences by Enrollment				
	(SK and JK) > SK only >		14.89*	5.92*	8.97*
HOMES:					
With JK (36)	SK+ (SK and JK)	3791	55.00	22.10	22.90
No JK (50)	SK only	4700	64.30	14.55	21.15
Differences by Type of School					
	SK+ (SK and JK) > No JK >		9.30*	7.55*	1.75
With JK (36)	(SK and JK)	1393	62.53	13.42	24.05
With JK (36)	SK only	2398	50.62	27.15	22.23
	Differences by Enrollment				
	(SK and JK) > SK only >		11.91*	13.73*	1.82

* significant at or beyond .01 level

TABLE 4

RELIGION OF THE PARENTS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Protestant	Roman Catholic	Jewish	Buddhist	Other
FATHER:							
With JK (36)	SK+ (SK and JK)	3586	44.42	38.76	2.23	0.25	14.34
No JK (50)	SK only	4439	53.50	29.83	1.58	0.18	14.91
Differences by Type of School							
	SK+ (SK and JK) > No JK		9.08*	8.93*	0.65	0.07	0.57
With JK (36)	(SK and JK)	1340	52.91	27.31	3.81	0.30	15.67
With JK (36)	SK only	2246	39.36	45.59	1.29	0.22	13.54
	Differences by Enrollment						
	(SK and JK) > SK only		13.55*	18.28*	2.52*	0.08	2.13
MOTHER:							
With JK (36)	SK+ (SK and JK)	3645	45.98	38.11	1.98	0.27	13.66
No JK (50)	SK only	4491	55.04	28.19	1.60	0.18	14.99
Differences by Type of School							
	SK+ (SK and JK) > No JK		9.06*	9.92*	0.38	0.09	1.33
With JK (36)	(SK and JK)	1364	53.81	28.23	3.52	0.36	14.08
With JK (36)	SK only	2281	41.30	44.02	1.05	0.22	13.41
	Differences by Enrollment						
	(SK and JK) > SK only		12.51*	15.79*	2.47*	0.14	0.67

* significant at or beyond .01 level

TABLE 5

OCCUPATIONAL CATEGORIES[a] OF PARENTS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Manual Occupations			Primarily Non-Manual Occupations			
			1	2	3	4	5	6	7
FATHER:									
With JK (36)	SK+ (SK and JK)	3609	18.80	32.42	25.93	16.76	2.77	1.66	1.66
No JK (50)	SK only	4460	12.96	27.09	25.40	19.93	5.83	4.82	3.97
Differences by Type of School									
	SK+ (SK and JK) > No JK		5.84*	5.33*	0.53	3.17*	3.06*	3.16*	2.31*
With JK (36)	(SK and JK)	1343	13.48	31.35	27.48	20.25	2.98	2.16	2.31
With JK (36)	SK only	2266	21.93	33.05	25.02	14.70	2.65	1.37	1.28
	Differences by Enrollment								
	(SK and JK) > SK only		8.45*	1.70	2.46	5.55*	0.33	0.79	1.03
MOTHER[b]:									
With JK (36)	SK+ (SK and JK)	938	17.70	39.98	8.32	27.51	3.52	1.27	1.70
No JK (50)	SK only	1156	16.35	30.54	10.29	33.65	5.19	2.68	1.30
Differences by Type of School									
	SK+ (SK and JK) > SK only		1.35	9.44*	1.97	6.14*	1.67	1.41	0.40
With JK (36)	(SK and JK)	320	11.25	41.88	6.25	32.19	5.31	1.56	1.56
With JK (36)	SK only	618	21.03	39.00	9.39	25.08	2.59	1.13	1.78
	Differences by Enrollment								
	(SK and JK) > SK only		9.78*	2.88	3.14	7.11	2.72	0.43	0.22

* significant at or beyond .01 level

[a] Categories range from 7 = high executives, owners of large concerns to 1 = unskilled or unemployed.

[b] Many mothers left this category blank.

TABLE 6

FORMAL EDUCATION CATEGORIES OF PARENTS GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Elementary School		Secondary School		University	
			1 Incomplete	2 Complete	3 Incomplete	4 Complete	5 Incomplete	6 Complete
FATHER:								
With JK (36)	SK+ (SK and JK)	3318	12.51	40.05	29.39	11.78	2.38	3.89
No JK (50)	SK only	4224	8.22	33.57	30.07	14.70	3.57	9.87
Differences by Type of School								
	SK+ (SK and JK) > No JK >		4.29*	6.48*	0.68	2.92*	1.19*	5.98*
With JK (36)	(SK and JK)	1218	4.93	38.42	34.65	14.45	2.38	5.17
With JK (36)	SK only	2100	16.91	41.00	26.33	10.24	2.38	3.14
	Differences by Enrollment							
	(SK and JK) > SK only >		11.98*	2.58	8.32*	4.21*	—	2.03*
MOTHER:								
With JK (36)	SK+ (SK and JK)	3362	12.97	37.18	33.49	13.41	1.52	1.43
No JK (50)	SK only	4239	8.89	29.72	36.05	16.84	2.95	5.55
Differences by Type of School								
	SK+ (SK and JK) > No JK >		4.08*	7.46*	2.56	3.43*	1.43*	4.12*
With JK (36)	(SK and JK)	1253	5.59	33.76	38.95	17.72	2.08	1.90
With JK (36)	SK only	2109	17.35	39.21	30.25	10.86	1.19	1.14
	Differences by Enrollment							
	(SK and JK) > SK only >		11.76*	5.45*	8.70*	6.86*	0.89	0.76

* significant at or beyond .01 level

TABLE 7

TYPE OF PUPIL RESIDENCES GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Type of Residence			
			House	Apartment	Flat	Rooms
With JK (36)	SK+ (SK and JK)	3699	61.26	12.00	21.36	5.38
No JK (50)	SK only	4625	63.31	16.17	17.19	3.33
Differences by Type of School						
	SK+ (SK and JK) > No JK >		2.05	4.17*	4.17*	2.05*
With JK (36)	(SK and JK)	1373	68.97	11.94	15.88	3.21
With JK (36)	SK only	2326	56.71	12.04	24.59	6.66
	Differences by Enrollment					
	(SK and JK) > SK only >		12.26*	0.10	8.71*	3.45*

* significant at or beyond .01 level

TABLE 8

SIZE OF PUPIL RESIDENCES GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Number of Rooms		
			1 - 4	5 - 8	9+
With JK (36)	SK+ (SK and JK)	3634	41.70	55.00	3.30
No JK (50)	SK only	4557	34.89	58.85	6.26
Differences by Type of School					
	SK+ (SK and JK) > No JK >		6.81*	3.85*	2.96*
With JK (36)	(SK and JK)	1345	34.20	61.49	4.31
With JK (36)	SK only	2289	46.09	51.20	2.71
	Differences by Enrollment				
	(SK and JK) > SK only >		11.89*	10.29*	1.60

* significant at or beyond .01 level

TABLE 9

SIZE OF THE FAMILY GIVEN IN PUPIL PERCENTAGES SHOWING POPULATION DIFFERENCES FOR TYPE OF SCHOOL AND ENROLLMENT IN JUNIOR KINDERGARTEN

Type of School	Kindergarten Enrollment	Number of Pupils	Number of People in the Home		
			2 - 4	5 - 7	8 - 12+
With JK (36)	SK+ (SK and JK)	3635	37.23	51.52	11.25
No JK (50)	SK only	4524	40.87	50.36	8.77
Differences by Type of School					
	SK+ (SK and JK) > No JK >		3.64*	1.16	2.48*
With JK (36)	(SK and JK)	1352	33.52	56.14	10.34
With JK (36)	SK only	2283	39.42	48.80	11.78
	Differences by Enrollment				
	(SK and JK) > SK only >		5.90*	7.34*	1.44

* significant at or beyond .01 level

APPENDIX B

NOTES ON NONRESIDENT PUPILS

Some elementary schools are located just within the boundaries of the City of Toronto. In many such cases arrangements are made by the neighbouring municipalities so that their pupils living near this school may go to it. Thus, the school boundaries extend beyond the City of Toronto's boundaries. Because the adjacent municipalities do not offer junior kindergarten these children may not go to junior kindergarten though they go to senior kindergarten. (Other kinds of nonresident students are few in number at this age level and are not relevant to the following discussion.)

In schools with junior kindergarten there were ninety-eight students (2.6% of their senior kindergarten population) who could not attend because they did not live in Toronto. Another eighty students attended senior kindergarten in schools without junior kindergarten.

The data on all these students is available in the Research Department. The effects of this data on the preceding tables is minimal and does not affect the major findings.